L1

(FILE 'HOME' ENTERED AT 13:33:52 ON 14 APR 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHOS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 13:34:03 ON 14 APR 2003

## SEA TANKYRASE

- 35 FILE BIOSIS
- 7 FILE BIOTECHABS
- 7 FILE BIOTECHDS
- 20 FILE BIOTECHNO
- 14 FILE CANCERLIT
- 56 FILE CAPLUS
  - 1 FILE CIN
- 3 FILE DDFU
- 112 FILE DGENE
  - 5 FILE DRUGU
  - 2 FILE EMBAL
- 34 FILE EMBASE
- 21 FILE ESBIOBASE
- 3 FILE FEDRIP
- 44 FILE GENBANK
- 7 FILE IFIPAT
- 13 FILE LIFESCI
- 32 FILE MEDLINE
- 10 FILE PASCAL
- 2 FILE PROMT
- 40 FILE SCISEARCH
- 20 FILE TOXCENTER
- 16 FILE USPATFULL
- 1 FILE USPAT2
- 12 FILE WPIDS
- 12 FILE WPINDEX

QUE TANKYRASE

FILE 'CAPLUS, SCISEARCH, BIOSIS, EMBASE, MEDLINE, ESBIOBASE, BIOTECHNO, TOXCENTER' ENTERED AT 13:35:01 ON 14 APR 2003

- L2 3 S L1 AND (TANKYRASE-H OR TAHO)
- L3 2 DUP REM L2 (1 DUPLICATE REMOVED)
- L4 19 S L1 AND (ISOFORM OR HOMOLOG)
- L5 11 DUP REM L4 (8 DUPLICATES REMOVED)

=> d 15 ibib ab 1-11

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1 L5

ACCESSION NUMBER: 2002:833007 CAPLUS

137:348412 DOCUMENT NUMBER:

Cloning, sequence, therapeutic and diagnostic use of a TITLE:

human tankyrase H and application to

screening of drugs modulating the cell cycle INVENTOR (S): Luo, Ying; Chan, Eva; Xu, Xiang; Huang, Betty;

Ossovskaya, Valeria

PATENT ASSIGNEE(S): Rigel Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE WO 2002086170 A1 20021031 WO 2002-US13185 20020425 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-843159 A 20010425

The present invention is directed to novel polypeptides, nucleic acids and related mols. which have an effect on or are related to the cell cycle. The nucleotide sequences and the encoded amino acid sequences of human tankyrase H isoforms 1 and 2 are provided. Also provided herein are vectors and host cells comprising those nucleic acid sequences, chimeric polypeptide mols. comprising the polypeptides of the present invention fused to heterologous polypeptide sequences, antibodies which bind to the polypeptides of the present invention and to methods for producing the polypeptides of the present invention. Further provided by the present invention are methods for identifying novel compns. which mediate cell cycle bioactivity, and the use of such compns. in diagnosis and treatment of disease.

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:521969 CAPLUS

DOCUMENT NUMBER: 137:90000

TITLE: Protein-protein interactions in adipocyte cells and method for selecting modulators of these interactions

Legrain, Pierre; Marullo, Stefano; Jockers, Ralf INVENTOR (S): PATENT ASSIGNEE(S): Hybrigenics, Fr.; Centre National De La Recherche

Scientifique

PCT Int. Appl., 125 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001-EP15423 20011228 WO 2002053726 A2 20020711 WO 2002053726 Α3 20030313 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003040089 A1 20030227 US 2002-38010 20020102 PRIORITY APPLN. INFO.: US 2001-259377P P 20010102 The present invention relates to protein-protein interactions of adipocyte. More specifically, the present invention relates to complexes of polypeptides, or polynucleotides encoding the polypeptides, fragments of the polypeptides, antibodies to the complexes. Selected Interacting Domains (SID) which are identified due to the protein-protein interactions, methods for screening drugs for agents which modulate the interaction of proteins, and pharmaceutical compns. that are capable of modulating the protein-protein interactions are further disclosed. ANSWER 3 OF 11 CAPLUS COPYRIGHT 2003 ACS 2002:485037 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

138:182574

TITLE:

RNA hairpins in noncoding regions of human brain and

Caenorhabditis elegans mRNA are edited by adenosine

deaminases that act on RNA

AUTHOR(S):

Morse, Daniel P.; Aruscavage, P. Joseph; Bass, Brenda

L.

CORPORATE SOURCE:

Department of Biochemistry and Howard Hughes Medical Institute, University of Utah, Salt Lake City, UT,

84132-3201, USA

SOURCE:

Proceedings of the National Academy of Sciences of the

United States of America (2002), 99(12), 7906-7911

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER:

National Academy of Sciences

DOCUMENT TYPE: LANGUAGE:

Journal English

AB Adenosine deaminases that act on RNA (ADARs) constitute a family of RNA-editing enzymes that convert adenosine to inosine within double-stranded regions of RNA. We previously developed a method to identify inosine-contg. RNAs and used it to identify five ADAR substrates in Caenorhabditis elegans. Here we use the same method to identify five addnl. C elegans substrates, including three mRNAs that encode proteins known to affect neuronal functions. All 10 of the C elegans substrates are edited in long stem-loop structures located in noncoding regions, and thus contrast with previously identified substrates of other organisms, in which ADARs target codons. To det. whether editing in noncoding regions was a conserved ADAR function, we applied our method to poly(A) + RNA of human brain and identified 19 previously unknown ADAR substrates. The substrates were strikingly similar to those obsd. in C elegans, since editing was confined to 3' untranslated regions, introns, and a noncoding RNA. Also similar to what was found in C elegans, 15 of the 19 substrates were edited in repetitive elements. The identities of the newly identified ADAR substrates suggest that RNA editing may influence many biol. important processes, and that for many metazoa, A-to-I conversion in coding regions may be the exception rather than the rule.

REFERENCE COUNT:

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 11 SCISEARCH COPYRIGHT 2003 ISI (R) DUPLICATE 2 ACCESSION NUMBER: 2002:547438 SCISEARCH

45

THE GENUINE ARTICLE: 566TZ

PARP and PARG as novel therapeutic targets TITLE:

Zhang J (Reprint); Li J H AUTHOR:

Guilford Pharmaceut Inc, 6611 Tributary St, Baltimore, MD CORPORATE SOURCE:

21224 USA (Reprint); Guilford Pharmaceut Inc, Baltimore,

MD 21224 USA

COUNTRY OF AUTHOR:

USA

DRUGS OF THE FUTURE, (APR 2002) Vol. 27, No. 4, pp. SOURCE:

371-383.

Publisher: PROUS SCIENCE, SA, PO BOX 540, PROVENZA 388,

08025 BARCELONA, SPAIN.

ISSN: 0377-8282.

DOCUMENT TYPE:

General Review; Journal

LANGUAGE:

English

REFERENCE COUNT: 123

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AΒ Poly(ADP-ribose) is synthesized by poly(ADP-ribose) polymerase (PARP) from beta-nicotinamide adenine dinucleotide (NAD(t)). It is mainly degraded by poly(ADP-ribose) glycohydrolase (PARG). The expanding family of PARP currently consists of PARP(1-3), vPARP, Tankyrase(1-2), and more members are being characterized. Similarly, the PARG family awaits more homologs to be identified. PARP(1), which is activated by DNA damage, accounts for >95% poly(ADP-ribose) synthesis. Poly(ADP-ribose) has a half-life of <1 min in vivo, due to its immediate degradation by PARG. The PARP(1)/PARG cycle results in depletion of NAD(t) and ATP, which can be prevented by inhibiting PARP, or PARG. After PARP1 was implicated in facilitating DNA repair, pharmaceutical companies began developing PARP inhibitors as potentiators to enhance chemotherapy and radiation therapy in cancers. Recent studies using PARP1 knockout mice and PARP inhibitors validated targeting the poly(ADP-ribose) pathway for ameliorating ischemia injury and abating inflammation. Multiple families of PARP and PARG inhibitors have been identified. A number of these inhibitors have demonstrated efficacy in animal models of cerebral ischemia, traumatic brain injury, Parkinson's disease, myocardial ischemia, retinal ischemia, kidney ischemia, type 1 diabetes, septic shock, hemorrhagic shock, arthritis, inflammatory bowel disease, multiple sclerosis and potentiation of chemotherapy. The therapeutic utility of

ANSWER 5 OF 11 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 3

ACCESSION NUMBER:

2001:937193 CAPLUS

PARP inhibitors is expected to be studied soon in clinical trials.

DOCUMENT NUMBER:

136:381185

TITLE:

Role for the related poly(ADP-ribose) polymerases

tankyrase 1 and 2 at human telomeres

AUTHOR (S):

Cook, Brandoch D.; Dynek, Jasmin N.; Chang, William;

Shostak, Grigoriy; Smith, Susan

CORPORATE SOURCE:

The Skirball Institute of Biomolecular Medicine, New

York University School of Medicine, New York, NY,

10016, USA

SOURCE:

Molecular and Cellular Biology (2002), 22(1), 332-342

CODEN: MCEBD4; ISSN: 0270-7306

PUBLISHER:

American Society for Microbiology

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Telomere maintenance is essential for the continuous growth of tumor cells. In most human tumors telomeres are maintained by telomerase, a specialized reverse transcriptase. Tankyrase 1, a human telomeric poly(ADP-ribose) polymerase (PARP), pos. regulates telomere length through its interaction with TRF1, a telomeric DNA-binding protein. Tankyrase 1 ADP-ribosylates TRF1, inhibiting its binding to telomeric DNA. Overexpression of tankyrase 1 in the nucleus promotes telomere elongation, suggesting that tankyrase 1 regulates access of telomerase to the telomeric complex. identification of a closely related homolog of tankyrase 1, tankyrase 2, opens the possibility for a second PARP at

telomeres. We therefore sought to establish the role of tankyrase 1 at telomeres and to det. if tankyrase 2 might have a telomeric function. We show that endogenous tankyrase 1 is a component of the human telomeric complex. We demonstrate that telomere elongation by tankyrase 1 requires the catalytic activity of the PARP domain and does not occur in telomerase-neg. primary human cells. To investigate a potential role for tankyrase 2 at telomeres, recombinant tankyrase 2 was subjected to an in vitro PARP assay.

Tankyrase 2 poly(ADP-ribosyl)ated itself and TRF1. Overexpression of tankyrase 2 in the nucleus released endogenous TRF1 from telomeres. These findings establish tankyrase 2 as a bona fide PARP, with itself and TRF1 as acceptors of ADP-ribosylation, and suggest the possibility of a role for tankyrase 2 at telomeres.

L5 ANSWER 6 OF 11 SCISEARCH COPYRIGHT 2003 ISI (R)

ACCESSION NUMBER: 2002:961892 SCISEARCH

THE GENUINE ARTICLE: 618NT

TITLE: The genes pme-1 and pme-2 encode two poly(ADP-ribose)

polymerases in Caenorhabditis elegans

AUTHOR: Gagnon S N; Hengartner M O; Desnoyers S (Reprint)

CORPORATE SOURCE: Univ Laval, Med Res Ctr, Dept Pediat, Laval, PQ, Canada

(Reprint); Univ Laval, Fac Med, Laval, PQ, Canada; Univ

Zurich, Inst Mol Biol, CH-8057 Zurich, Switzerland

COUNTRY OF AUTHOR: Canada; Switzerland

SOURCE: BIOCHEMICAL JOURNAL, (15 NOV 2002) Vol. 368, Part 1, pp.

263-271.

Publisher: PORTLAND PRESS, 59 PORTLAND PLACE, LONDON W1N

3AJ, ENGLAND. ISSN: 0264-6021. Article; Journal

DOCUMENT TYPE: LANGUAGE:

E: English

REFERENCE COUNT: 38

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

Poly(ADP-ribose) polymerases (PARPs) are an expanding, well-conserved family of enzymes found in many metazoan species, including plants. The enzyme catalyses poly(ADP-ribosyl)ation, a post-translational modification that is important in DNA repair and programmed cell death. In the present study, we report the finding of an endogenous source of poly(ADP-ribosyl)ation in total extracts of the nematode Caenorhabditis elegans. Two cDNAs encoding highly similar proteins to human PARP-I (huPARP-1) and huPARP-2 are described, and we propose to name the corresponding enzymes poly(ADP-ribose) metabolism enzyme I (PME-1) and PME-2 respectively. PME-1 (108 kDa) shares 31 % identity with huPARP-1 and has an overall structure similar to other PARP-I subfamily members. It contains sequences having considerable similarity to zinc-finger motifs I and 11, as well as with the catalytic domain of huPARP-1. PME-2 (61 kDa) has structural similarities with the catalytic domain of PARPs in general and shares 24% identity with huPARP-2. Recombinant PME-1 and PME-2 display PARP activity, which may partially account for the similar activity found in the worm. A partial duplication of the pme-1 gene with pseudogene-like features was found in the nematode genome. Messenger RNA for pme-1 are 5'-tagged with splice leader 1, whereas those for pme-2 are tagged with splice leader 2, suggesting an operon-like expression for pme-2. The express ion pattern of pme-1 and pme-2 is also developmentally regulated. Together, these results show that PARP-1 and -2 are conserved in evolution and must have important functions in multicellular organisms. We propose using C. elegans as a model to understand better the functions of these enzymes.

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:320081 CAPLUS

DOCUMENT NUMBER: 134:337621

TITLE: Cloning and sequence of tankyrase H and uses in screening for modulators of the cell cycle

INVENTOR(S):

Luo, Ying; Chan, Eva; Xu, Xiang; Huang, Betty

Rigel Pharmaceuticals, Inc., USA

SOURCE:

PCT Int. Appl., 63 pp.

BOOKCE.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

\_\_\_\_\_

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2001030987 A2 20010503 WO 2000-US41528 20001025
WO 2001030987 A3 20011213

W: AU, CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

EP 1238063 A2 20020911 EP 2000-988503 20001025

 ${\tt R:} \quad {\tt AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,} \\$ 

IE, FI, CY

JP 2003512836 T2 20030408 PRIORITY APPLN. INFO.:

JP 2001-533970 20001025 US 1999-427154 A 19991025 WO 2000-US41528 W 20001025

AB The present invention is directed to novel polypeptides, nucleic acids and related mols. which have an effect on or are related to the cell cycle.

Amino acid and encoding nucleotide sequences of a cell cycle protein tankyrase H (tankyrase homolog)

isoforms 1 and 2 are provided. Methods of use include use in assays screening for modulators of the cell cycle and use as therapeutics. Also provided herein are vectors and host cells comprising those nucleic acid sequences, chimeric polypeptide mols. comprising the polypeptides of the present invention fused to heterologous polypeptide sequences, antibodies which bind to the polypeptides of the present invention and to methods for producing the polypeptides of the present invention. Further provided by the present invention are methods for identifying novel compns. which mediate cell cycle bioactivity, and the use of such compns. in diagnosis and treatment of disease.

L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:50829 CAPLUS

DOCUMENT NUMBER: TITLE:

134:111275
Protein and cDNA sequences of human tankyrase sequence homolog (THP) and therapeutic and

diagnostic uses thereof

INVENTOR(S):

Berthelsen, Jens; Toma, Salvatore; Isacchi, Antonella

Pharmacia & Upjohn S.p.A., Italy

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND		DATE			APPLICATION NO. DATE									
WO	O 2001004326			A1		20010118			WO 2000-EP6609 20000703									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	ŞL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	
		YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM					
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		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	ΝL,	PT,	SE,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				

US 6455290 В1 20020924 US 1999-350982 19990709 EP 2000-954480 EP 1194568 A1 20020410 20000703

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

JP 2003504067 T2 20030204 JP 2001-509530 20000703 PRIORITY APPLN. INFO.: US 1999-350982 A 19990709 WO 2000-EP6609 W 20000703

The present invention provides protein and cDNA sequences of a novel human tankyrase sequence homolog (THP). In addn., the invention provides expression vectors, host cells and methods for its prodn. The invention also provides methods for the identification of THP agonists/antagonists, useful for the treatment of human diseases, such as

human cancer and age related diseases. REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS 3 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 11 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:712257 CAPLUS

DOCUMENT NUMBER: 135:369685

TITLE: TANK2, a new TRF1-associated poly(ADP-ribose)

polymerase, causes rapid induction of cell death upon

overexpression

Kaminker, Patrick G.; Kim, Sahn-Ho; Taylor, Rebecca AUTHOR (S):

D.; Zebarjadian, Yeganeh; Funk, Walter D.; Morin,

Gregg B.; Yaswen, Paul; Campisi, Judith Life Sciences Division, Lawrence Berkeley National CORPORATE SOURCE:

Laboratory, Berkeley, CA, 94720, USA

Journal of Biological Chemistry (2001), 276(38), SOURCE:

35891-35899

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

Biology DOCUMENT TYPE: Journal LANGUAGE: English

Tankyrase (TANK1) is a human telomere-assocd. poly(ADP-ribose) AB polymerase (PARP) that binds the telomere-binding protein TRF1 and increases telomere length when overexpressed. Here we report characterization of a second human tankyrase, tankyrase 2 (TANK2), which can also interact with TRF1 but has properties distinct from those of TANK1. TANK2 is encoded by a 66-kilobase pair gene (TNKS2) contg. 28 exons, which express a 6.7-kilobase pair mRNA and a 1166-amino acid protein. The protein shares 85% amino acid identity with TANK1 in the ankyrin repeat, sterile .alpha.-motif, and PARP catalytic domains but has a unique N-terminal domain, which is conserved in the murine TNKS2 gene. TANK2 interacted with TRF1 in yeast and in vitro and localized predominantly to a perinuclear region, similar to the properties of TANK1. In contrast to TANK1, however, TANK2 caused rapid cell death when highly overexpressed. TANK2-induced death featured loss of mitochondrial membrane potential, but not PARP1 cleavage, suggesting that TANK2 kills cells by necrosis. The cell death was prevented by the PARP inhibitor 3-aminobenzamide. In vivo, TANK2 may differ from TANK1 in its intrinsic or regulated PARP activity or its substrate specificity.

REFERENCE COUNT: THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS 48 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 11 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:742303 CAPLUS

DOCUMENT NUMBER: 133:319061

TITLE: Cloning, characterization and therapeutic use of a

human tankyrase II

INVENTOR(S): Morin, Gregg B.; Funk, Walter D.; Piatyszek,

Mieczyslaw A.

PATENT ASSIGNEE(S): Geron Corporation, USA SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                   KIND DATE
                                       APPLICATION NO. DATE
     -----
    WO 2000061813
                    A1 20001019
                                       WO 2000-US9558 20000410
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                     AA
                          20001019
                                        CA 2000-2360318 20000410
    US 2003032769
                     A1
                          20030213
                                        US 2001-972115
                                                        20011005
PRIORITY APPLN. INFO.:
                                     US 1999-128577P P 19990409
                                     US 1999-129123P P 19990413
                                     WO 2000-US9558
                                                    W 20000410
```

As new protein named tankyrase II is described in this disclosure. Sequences for the human tankyrase II cDNA and the protein translation product are provided. Also provided are species homologs, muteins, related nucleic acids, peptides, and drug screening assays. Tankyrase II interacts with telomere-assocd. proteins, thereby affecting telomerase activity and potentially telomere length. The materials and techniques provided in this disclosure allow tankyrase II activity to be studied in vitro and manipulated inside cells - to the potential benefit of clin. conditions assocd. with a defect in telomerase activity, or the replicative capacity of affected cells.

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:517278 CAPLUS

1

DOCUMENT NUMBER:

134:98639

TITLE:

Isoforms of poly(ADP-ribose) polymerase:

potential roles in cell death

AUTHOR(S):

Jacobson, Elaine L.; Jacobson, Myron K.

CORPORATE SOURCE:

Department of Clinical Sciences Center for Nutritional

Sciences Lucille P. Markey Cancer Center Advanced Science and Technology Commercialization Center,

University of Kentucky, Lexington, KY, USA

SOURCE:

Cell Death (2000), 323-329. Editor(s): Szabo, Csaba.

CRC Press LLC: Boca Raton, Fla.

CODEN: 69AEOT

DOCUMENT TYPE:

LANGUAGE:

Conference; General Review

English

AB A review, with 26 refs., is presented regarding the possible roles of isoforms of poly(ADP-ribose) polymerase (PARP) in cell death.

Topics discussed include PARP-1, tankyrase, PARP-2, and vault-PARP.